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ABSTRACT OF DISCLOSURE

5 A partial stroke testing system for online testing of  
emergency shut-off valve, said system is designed for  
implementation on an emergency shut-off valve with a main  
solenoid with manual reset, main solenoid valve, quick exhaust  
valve and a pneumatic actuator connected to a source of  
pressurized air supply for opening and closing the said emergency  
shut-off valve and the said shut-off valve normally movable  
10 between a fully open and fully closed position. The system also  
include control means programmed into the plant emergency  
shutdown system controller for initiating electrical signal for  
initiating a test and for enhancing the bleed rate from the said  
pneumatic actuator in the event of a emergency trip signal. Test  
15 means for testing the said emergency shut-off valve without fully  
closing the emergency shut-off valve in response to signal from the  
said control means is included in the system. The said test means,  
controlled by the said control means, include a second solenoid and  
a second solenoid valve for bleeding off pressurized air to thereby  
20 move the said emergency shut-off valve from full opened position  
to partially closed position. Means for limiting the movement of  
said emergency shut-off valve to a partially closed position because  
of the bleeding of pressurized air is included in the system. The  
system also includes an isolation valve for isolating the said test  
25 means for maintenance purpose.